### **Maryland Historical Trust**

Maryland Inventory of H	istoric Properties number:	15A-ZGE	oD.	•
Name: #3034	/4540 ove	Little	Surpoude	17alls
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The bridge referenced herein was inventoried by the Maryland State Highway Administration as part of the Historic Bridge Inventory, and SHA provided the Trust with eligibility determinations in February 2001. The Trust accepted the Historic Bridge Inventory on April 3, 2001. The bridge received the following determination of eligibility.

Eligibility Recommended		RYLAND HISTOI	RUST gibility N	Jot Re	comm	ended	
Criteria:AB		Considerations:					 1
Comments:	· · · · · · · · · · · · · · · · · · ·		 	·			
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Reviewer, OPS:_Anne E. Br	uder		Dat	e:3 .	April 2	2001_	
Reviewer, NR Program:Pe	ter E. Kurt	ze	 Dat	e:3 .	April 2	2001_	

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NAME AND SHA NO.: 3034 LOCATION Road Name and Number: US 40 over Little Gunpowder Falls Joppatowne \_ vicinity City/Town: Baltimore/Harford County: Ownership: X State County Municipal Other Bridge projects over: \_ Road \_ Railway X Water \_ Land Is bridge located within designated district?: \_ yes X no \_\_\_ NR listed district \_ NR determined eligible district \_\_\_ locally designated \_\_ other Name of District **BRIDGE TYPE** \_\_ Timber Bridge \_\_ Beam Bridge \_\_ Truss-Covered \_\_ Trestle \_\_ Timber-and-Concrete Stone Arch Bridge \_\_ Metal Truss Bridge \_\_ Moveable Bridge \_\_ Swing \_\_ Bascule Single Leaf \_\_ Bascule Multiple Leaf \_\_ Vertical Lift \_\_ Retractile \_\_ Pontoon Metal Girder \_\_ Rolled Girder \_\_ Rolled Girder Concrete Encased \_\_ Plate Girder \_\_ Plate Girder Concrete Encased \_\_ Metal Suspension

\_\_ Metal Arch

X Concrete

Metal Cantilever

\_ Other

229

\_ Concrete Arch \_ Concrete Slab X Concrete Beam \_ Rigid Frame

Type Name \_\_\_

#### **DESCRIPTION**

### Describe the Setting:

Situated in part of Maryland's Tidewater physiographic zone, Bridge 3034 carries US 40 over Little Gunpowder Falls in southeastern Baltimore County. The road traverses the relatively level topography in a northeast-southwest fashion while Little Gunpowder Falls generally flows southerly. Although properties immediately surrounding the bridge feature woodland, nearby sections adjacent to US 40 possess mixed residential and commercial development primarily dating from the twentieth century. Little Gunpowder Falls forms the boundary between Baltimore and Harford counties.

# Describe the Superstructure and Substructure: (Discuss points identified in Context Addendum, Section C)

Bridge 3034 consists of twin, dual concrete-beam spans, each measuring 45-feet clear and carrying two traffic lanes on 30-foot clear roadways covered with two inches of bituminous wearing surface. W-beam guardrails have been attached to the interior surfaces of the balustrades facing the roadways. W-beams also protect the bridge approaches. In addition to concrete abutments and wing walls, a single concrete pier supports the twin bridge's superstructure.

Inspection records indicate the spans possess cracking, patching, spalling and surface erosion. The surfaces of the exterior girder display horizontal and longitudinal cracks. Interior girders exhibit patching throughout the spans, especially on the bottom surfaces and the bearing seats. Prior large spalled areas on the abutments have been patched although the abutments still exhibit surface spalling and erosion. The wing walls also possess light surface erosion with light random cracks. The balustrades feature large sections of exposed reinforcing bars where areas previously patched have broken-up and spalled off.

A survey of historic concrete beam bridges undertaken by the Maryland State Highway Administration in the Fall of 1995 identified 113 bridges of that type located throughout the state. Nearly one-quarter (26) of that total were double-span bridges; 37 bridges (33%) were multiple span.

#### Discuss major alterations:

Inspection records do not describe any major alterations undertaken on the bridge's fabric or placement.

## **HISTORY**

When Built: 1935

Why Built: Initial construction of New Philadelphia Road, now US 40.

Who Built: State Roads Commission

Who Designed: Unknown. Why Altered: Not applicable.

Was this bridge built as part of an organized bridge building campaign?: Yes.

During the early 1930s, the State Roads Commission built a 30-mile, dual-lane divided highway linking Baltimore and Aberdeen. Designed to alleviate traffic congestion along the muchtraveled Philadelphia Road (current MD 7) tracing much of the original, Colonial-era road between Baltimore and Philadelphia, the New Philadelphia Road became Maryland's principal new construction effort of the 1930s. Erected on an entirely new alignment bypassing established towns and railroad crossings, the New Philadelphia Road became known as the Pulaski Highway and now forms part of current US 40. Bridge 3034 formed part of the Baltimore-Aberdeen section of the New Philadelphia Road.

### **SURVEYOR ANALYSIS**

This bridge may have NR significance for association with:

 $\underline{X}$  A (Events)  $\underline{X}$  C (Engineering/Architectural Character)

Was this bridge constructed in response to significant events in Maryland or local history? Erected in 1935, Bridge 3034 formed part of the New Philadelphia Road built in response to increased automobile use on state roads and the growing inadequacy of the original road system improved by the State Roads Commission (SRC) to handle larger traffic volumes. The SRC's major building effort during the 1930s, and one of the first on a new alignment designed to bypass towns and railroads slowing traffic movement, construction of the road marked a transition from the improvement of earlier roads and turnpikes characterizing the SRC's operations during the early twentieth century to an organization of highway and transportation planners.

When the bridge was built, and/or given a major alteration, did it have a significant impact on the growth and development of the area?

Construction of the New Philadelphia Road provided entry to previously less-accessible areas of southeastern Baltimore and Harford counties and had a significant impact on the area's subsequent development. Bridge 3034 participated in this general trend.

Is the bridge located in an area which may be eligible for historic designation, and would the bridge add or detract from the historic and visual character of the possible district?

Bridge 3034 may contribute to a potential historic district encompassing resources related to development along US 40 after construction of the New Philadelphia Road.

## Is the bridge a significant example of its type?

This bridge may survive as a good example of its type. As-built drawings indicate that this bridge utilized the State Roads Commission's 1933 standard specifications. Although many of the character defining elements are in a deteriorated state, the bridge is identifiable as an elaboration of those standard designs on a significant building project.

## Does the bridge retain integrity of the important elements described in the Context Addendum?

This bridge possesses fair integrity of its character defining elements. Sections of many of the bridge's girders and balusters possess deep spalling with exposed reinforcing members. In addition, the abutments and wing walls display cracking and surface erosion. The installation of w-beam guardrails also detracts from the bridge's overall integrity.

# Is the bridge a significant example of the work of the manufacturer, designer, and/or engineer, and why?

This structure may be a significant example of the State Roads Commission's bridge building. Utilizing and elaborating 1933 standard specifications, the State Roads Commission erected a bridge meeting the unique requirements of the project and location.

## Should this bridge be given further study before significance analysis is made, and why?

Yes. Further study may indicate whether a linear historic district encompassing resources associated with the original construction of the New Philadelphia Road during the early 1930s and the surrounding area's subsequent development exist. Bridge 3034 may contribute to this potential historic district.

**Date:** 13 May 1996

**Telephone:** (717) 691-1340

# MARYLAND INVENTORY OF HISTORIC PROPERTIES HISTORIC BRIDGE INVENTORY MARYLAND STATE HIGHWAY ADMINISTRATION MARYLAND HISTORICAL TRUST

### **BIBLIOGRAPHY**

Maryland State Highway Administration

As-Built Drawings. On file at 707 North Calvert Street, Baltimore.

Bridge Inspection Reports. On file at 707 North Calvert Street, Baltimore.

Spero, P.A.C., & Company, and Louis Berger & Associates, Inc.

1994 Historic Bridges in Maryland: Historic Context Report. Maryland State Highway

Administration, Baltimore.

State Roads Commission of Maryland

1934 Report of the State Roads Commission of Maryland. Operating Report for the Years

1933 - 1934. Baltimore.

1958 A History of Road Building in Maryland. Baltimore.

### **SURVEYOR INFORMATION**

Name:

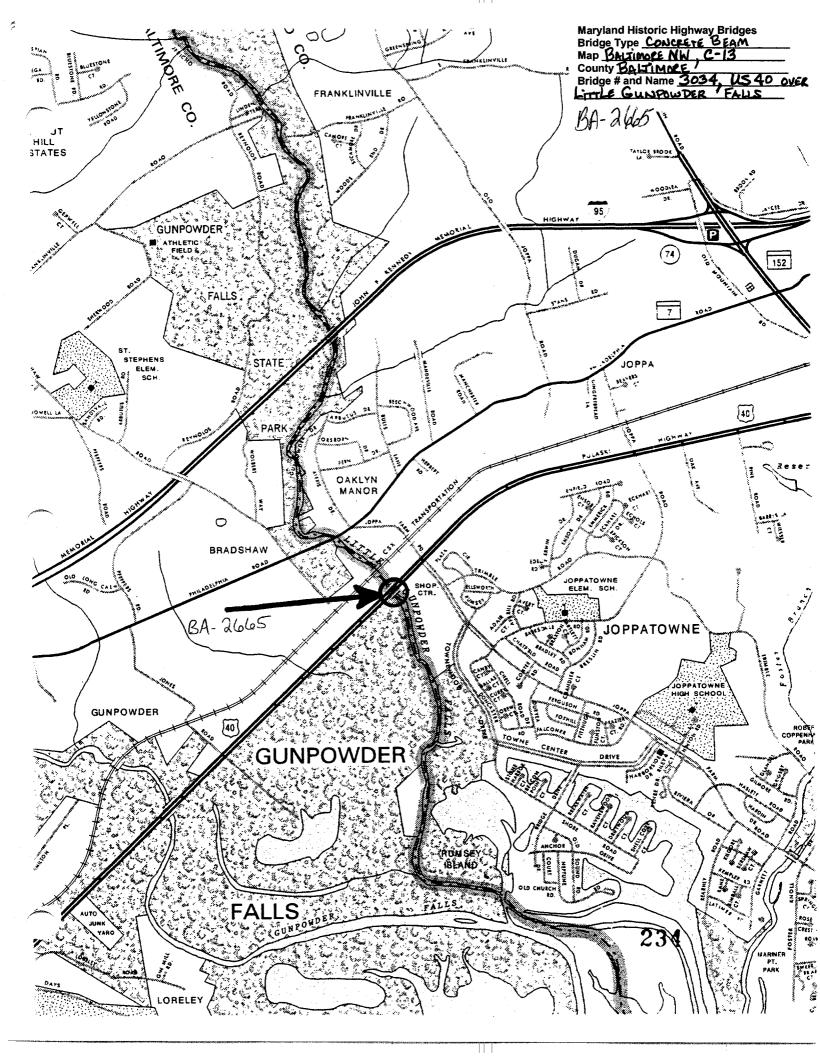
Stuart Paul Dixon

Organization:

KCI Technologies, Inc.

Address:

5001 Louise Dr., Suite 201 Mechanicsburg, PA 17055





# Inventory # BA-2665

Name 3034-	US 40 OVER LITTLE GUINPOWDER FALLS
County/State	BALTIMORE COUNTY MD
Name of Pho	tographer DAVE DIENL
Date	5
Location of N	Negative SHA
Description	NURTH APPROACH LOOKING
1	SUUTH

Number 32 of 365



## Inventory #8A-2665

Name 3034 - US 40 OVER LITTLE GUNPOWDER FALLS
County/State BALTIMORE COUNTY/MO
Name of Photographer DAVE PIEHL
Date 195
Location of Negative SHA
Description WEST ELEVATION LOOKING
Description WEST ELEVATION LOOKING SOUTHEAST

Number 28 of 345



# Inventory # <u>BA-2665</u>

Name 3034-US40 OVER UTTLE GUNDWOER FAULS
County/State BALTIMURE COUNTY/MO
Name of Photographer DAVE DIEAL
Date 1/95
Location of Negative SHA
Description EAST ELEVATION LOOKING NURTHWEST
NURTHWEST

Number 34 of 35



## Inventory # <u>84-2465</u>

	-US 40 OVER LITTLE GUNYAUDER FALL
County/State	BALTIMORE COUNTY/MO
Name of Pho	tographer DAVE DIENL
Date	15
Location of I	Negative SHA
Description	SOUTH APPROACH WOKING

Number 35 of 36

LIMITUE CUINTECTION DER FAILLS BRIDGE Buntan MORE THANKS STATE ROADS - CHAIRMAN E DREMER TEE ROBERT LACY H. D. WHELAR SE

## Inventory #8A-2665

Name 3034- US 40 OVER WITH GUN POWDER FALL
County/State 174 LTIMORE COUNTY/MD
Name of Photographer DAVE DIEHL
Date 195
Location of Negative SHA
Description PLAQUE ON SOUTH END
OF MEDIAN PARAPET

Number 360f 365